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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,271	02/07/2002	Jacqueline Huet-Olivier	113035.00119	6705

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EXAMINER

ROBERTS, PAUL A

ART UNIT PAPER NUMBER

3731

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,271

Applicant(s)

HUET-OLIVIER ET AL.

Examiner

Paul A Roberts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/20/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 6, 7, 8, 9, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. 5584629 in view of McDevitt et al 20030130695. Bailey et al. discloses, "An implantable system (figure 1) for anchoring stitching threads within a bone tunnel, characterized in that it comprises an implantable device (12) and a complementary piece (35), and comprises: a sheath (11) arranged so as to receive at least one stitching thread (the thread is not claimed but the sheath is capable of receiving a thread), and a head (42) disposed at a proximal end (24) of the said sheath (11) and extending radially from the external wall (12) thereof; the said piece being intended to be introduced into the sheath (11), so as, in a first position, to leave free the movement of the stitching threads (1st position is the not inserted position) inside the sheath (11) and, in a second position, be able to block this movement (the piece is fully inserted). Bailey et al. does not disclose the material of the device should be bioresorbable. It is exceedingly well known in the art to make bone screws and suture anchors bioresorbable to enable the device to be removed without invasive surgery. McDevitt et al teaches making a bone anchor bioresorbable for the purpose of allowing the anchor to degenerate thereby preventing invasive surgery to remove it. At the time of the invention it would have been

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obvious to one having ordinary skill in the art to use make the Bailey et al. anchor out of bioresorbable material as taught by McDevitt et al. for the purpose of allowing the anchor to degenerate thereby preventing invasive surgery to remove it.

2. Regarding claim 2, the external wall (12) of the sheath (11) comprises a means of anchoring the device (figure 1) in the bone tunnel.

3. Regarding claim 3, the sheath (11) is formed by an annular piece whose distal end (13) is frustoconical in shape (the sheath is slightly frustoconical), the said piece having an opening (27) with a substantially circular cross-section that passes right through on its longitudinal axis.

4. Regarding claim 4, the anchoring means are formed by at least one protrusion (each ring of the thread is a protrusion) in the form of a ring that extends radially on the external surface (12) of the annular piece.

5. Regarding claim 6, the head is rectangular in cross-section, the lower face of the head forms an angle of substantially 90 degrees with the longitudinal axis of the sheath.

6. Regarding claim 7, the complementary piece is formed by a cylindrical rod whose cross-section is slightly less than the inside diameter of the sheath and the distal part of which is provided in the grooves each intended to receive a stitching thread, the said grooves being arranged so as on the one hand to separate the said threads and on the other hand to guide their sliding inside the sheath.

7. Regarding claim 8, the thread provides a plurality of grooves.

8. Regarding claim 9, the head is capable of wedging the threads and serving as a stop during positioning of the rod.

9. Regarding claim 12, the sheath and piece are made of bioresorbable material.

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10. Regarding claim 15, the bone anchor of claim 1 is rendered obvious by the above combination. Using the bone anchor with a tool to insert it also known. That's why the head of anchor is shaped to receive a tool, as shown in figure 1. At the time of the invention it would have been obvious to one having ordinary skill in the art to use a tool to insert the anchor since the anchor has a groove to fit a tool.

11. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined Bailey device as applied to claim 1 in view of Coudane FR2745005. The combined Bailey device comprises a bioresorbable material but does not disclose in detail the specific limitations of that material. Coudane teaches making a material that is designed for surgical use, is bioresorbable, and aids in the molding of the device. The material disclosed by Coudane is the same as the material claimed in claims 13 and 14. At the time of the invention it would have been obvious to one having ordinary skill in the art to use the bioresorbable material of Coudane to build the suture anchor since the material is for surgical use, is bioresorbable, and aids in the molding of the device.

Allowable Subject Matter

12. Claims 10-14 and 16-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 10-14, the opening in the sheath and the head of Bailey are not conical in shape. Regarding claims 16-24, in the previous claims (claims 1 and 15) the threads are not positively recited. In claim 16 the interaction between the various parts of the device and threads are claimed.

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This requires the thread to be part of the invention as opposed to simply requiring the device to be capable of holding a thread. There is no motivation in Bailey to use a thread with his device as claimed by the applicant.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following are US patents/publications of bone anchors which have structural similarities to the applicant's device.

6458132 6689135 2003/0158581 5702397 5814072 RE37963 5129901 5354298
5845645 6200329 6562071 6045574


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A Roberts whose telephone number is (703) 305-7558. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on 703-308-2496. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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04/19/04



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